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ReSS – Phase II
Project Closing Meeting
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Introduction

- Status
- Effort Spent
- Operations & Support
- Phase II: Reasons for Closing the Project
- Phase II: Features Delivered
- Outstanding Risks
- Next Steps
- Lessons Learned
- Conclusion

Status

- Phase II started in Sep 2008
- Currently supported VOs
  - CMS
  - DES
  - DZero
  - Engagement
  - FermiGrid
- Operations
  - Stable operations
    - Issues related to HA have been addressed
  - Ongoing support

Phase II: Effort Spent

	Personnel	FTE	Responsibilities
Current Status	Parag Mhashilkar	Current: 20%	Project Lead/Core Developer/Support
	Gabriele, Garzoglio, Tanya Levshina	As needed	Backup
After Project Closure	Parag Mhashilkar	As needed	Consulting and Support
	Gabriele, Garzoglio, Tanya Levshina	As needed	Backup

Operations & Support

- **Operations:** The ReSS services operated and well supported by the FermiGrid group.
- **Support:** Tickets Triaged through CD Servicedesk.
  - Fermigrid Support Group:
    - Disruption of ReSS service(s)
    - The service cannot be contacted
    - Machine hosting the service is not reachable
  - ReSS Developer's Support Group:
    - Site(s) not reporting to ReSS
    - How to extract required information from ReSS
    - Possible bugs preventing site(s) to advertise to ReSS or possible bugs such that site advertise incorrect information.

Phase II: Reason for Closing the Project

- Phase II started to add new features to the ReSS project.
  - Support for MPI
  - Support for advertising SE
  - Improved robustness through HA, etc.
  - […]
- The project has achieved the initial goals stated in the charter
- The project has provided additional features as per user change-requests made by the stakeholders during the lifetime of the project.
- As of now there are no outstanding user requests known to the project.

Phase II: Features Delivered

Milestones/Deliverables	Stakeholder	Planned	Completed
Support for MPI users	OSG	12/31/2008	12/31/2008
Improved support for Storage Elements registration with ReSS	OSG	12/31/2008	12/31/2008
Test suite to identify installation/deployment issues	ReSS	03/31/2009	05/07/2009
Compliance with the OSG 1.2 Generic Information Services	OSG	02/28/2009	07/27/2009
Compliance with the Generic Information Provider to support Glue Schema V2	OSG	-	Not Completed
Improved security for resource registration with ReSS	ReSS, OSG, Engagement	11/30/2009	08/12/2010
Support to run ReSS services in High Availability deployment mode	FermiGrid	03/31/2009	06/17/2009
Compliance of ReSS with the FermiGrid Software Acceptance Process	FermiGrid	09/31/2009	09/15/2009
ReSS Security Review *	Comp Div	10/31/2009	11/06/2009
RSV Probes for ReSS *	OSG	02/28/2010	02/28/2010
Monitoring of resources in the condor collector in HA *	ReSS	03/31/2010	03/31/2010

Outstanding Risks

Risk	Impact Level	Risk Plan Actions
Support for CEMon dropped by GLite	High	This will need working closely with GIP group to find an alternative means to achieve the functionality provided by CEMon in case this happens. OSG can also evaluate and adopt advertising tool developed my Brian Bockelman. This tool is currently deployed on Compute elements in University of Nebraska at Lincoln. Chance of support for CEMon being withdrawn by the CEMon group is minimal but the impact on OSG Information Services could be significant.
Adaptation to GLUE Schema V2	Medium	At the time of closing this project, OSG has yet to adapt Glue Schema V2. The changes to adapt Glue Schema V2 could be complex and may not integrate with the existing ReSS services.

Next Steps

- No current plan to open a new phase of the project.
  - Starting September 2010, Parag Mhashilkar will ramp down the effort level to consulting and emergency maintenance only as required.
- If need be; Open new phase of the project in future only after evaluating -
  - Any new user requests in future
  - If the need be to add features to the existing ReSS services.

Lessons Learned

- Not easy managing the code (OSG plug-in) that depended on third party s/w
  - Good collaboration between gLite and the ReSS project.
  - **Lesson:** Write access to code repositories could have made the turn-around time faster
- The troubleshooting was often complicated and time consuming.
  - Failures were often in dependent packages, GIP, CE security config or Tomcat config
  - RSV probes: Number of such problems reported to ReSS team have gone down.
  - **Lesson:** Automation of the troubleshooting tasks can be extended to software in OSG stack.
- Sites slow in deploying patches to the OSG software stack
  - Sites miss on some crucial patches and face already addressed problems
  - **Lesson:** Sites should be encouraged/enforced to deploy the patches more rapidly and also make the upgrade process much transparent to the sites
- ReSS team worked with several OSG VOs . The project group learned several valuable lessons and developed proficiencies in the OSG Information Services.
  - **Recommendation:** ReSS project recommends the OSG and the Computing Division to involve the members of ReSS team in the investigations on the next generation of OSG's Information Services

Conclusion

- Stable operations
- Features in the original charter delivered
- Some tasks got delayed
  - Reduction in % FTE
  - Accepted change requests not accounted in the charter
- Successful collaboration with the CEMon group
- ReSS project recommends the OSG and the Computing Division to involve the members of ReSS team in the investigations on the next generation of OSG's Information Services
- Project has been successful, thanks to, OSG, CD Fermilab, ReSS stakeholders, OSG GOC, CEMon-Glite group.